

REMARKS

This Response is made in reply to the Office Action dated May 24, 2005. Claims 1, 4, 7, 10 and 13 are pending. Claim 13 is a newly added independent claim that reads upon the elected species. Claims 2, 3, 5, 6, 8, 9, 11 and 12 have been cancelled and claims 7 and 10 have been withdrawn from consideration in response to an earlier Election/Restriction Requirement. Claims 1, 4 and 13 are currently under consideration. Further, by this Response, claim 1 has been amended. Applicants respectfully submit that nothing in the current amendment constitutes new matter.

In the Office Action, the Examiner:

rejected claims 1 and 4 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,855,552 to Marceau et al.; and

rejected claims 1 and 4 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 2,501,393 to Kendall.

Regarding the anticipation rejections of claims 1 and 4 based on Marceau, Applicants' amended claim 1 recites, in part:

a primary winding wound about one of a plurality of iron-core legs of an iron core ... ; and

a heat pipe wound one turn about an other iron-core leg of said iron core.

Marceau fails to disclose that a primary winding is wound around one leg of an iron core and that a fluid heat device is wound around another leg of the iron core. Rather, Marceau discloses a fluid heating device comprising a non-conductive magnetic core 11 having a primary winding 12 and a secondary electrically conductive jacket 13 surrounding the primary winding 12 (see FIG. 1B). Marceau also discloses that the secondary conductive jacket 13 is disposed on a thermally conductive and electrically non-conductive insulation medium 14 (see col. 3, lines 26-31). In addition, Marceau describes that the secondary jacket 13 is constituted by a core formed of a plurality of windings 18 of a metallic conduit (see col. 3, lines 46-48) and that the fluid, which is introduced at the input 20, flows around the coil windings 18 and exits at the outlet 21 (see col. 3, lines 55-57). In other words, Marceau discloses that the coil windings 18 used to heat the fluid are wound around

the *same* core 11 as is the primary winding 12. Thus, Applicants respectfully submit, Marceau fails to disclose each and every element of amended claim 1.

For an anticipation rejection to be proper, the cited reference must disclose each and every element. As Marceau does not disclose all the recitations of amended claim 1, Applicants respectfully submit Marceau fails to anticipate claim 1 and that for at least the above reasons claim 1 is allowable over Marceau.

Claim 4 depends from claim 1 and contains additional recitations thereto. Thus, for at least all of the reasons presented above, claim 4 is also not anticipated by Marceau.

Regarding the anticipation rejections of claims 1 and 4 based on Kendall, Applicants' amended claim 1 recites, in part:

a heat pipe winded one turn about an other iron-core leg of said iron core, having a communication hole to which the heat-exposed food is supplied, the communication hole continuing in a loop shape, the loop shape formed by distinct first and second communication channels extending around and corresponding to the cross-sectional shape of the iron-core leg.

Support in the instant specification for reciting such communication channels can be found at least in FIG. 1 (communication holes 31a and 31b) and in paragraph [0026].

Kendall fails to disclose that a heating unit is wound about a leg of the iron core such that the heating unit includes a loop shape formed by two distinct communication channels. Rather, Kendall discloses an induction fluid heater comprising a four-sided transformer core 1, open at the center thereof and provided on one side with a primary winding 2 (see col. 1, lines 49-51) and describes that a heating unit 4 is positioned upon the side 3 of the core (see col., lines 53-54). Further, Kendall teaches that the heating unit is constructed of material such as cast iron, which offers high resistance to the passage of electric current and that the heating unit consists of a cylindrical body 5 provided with an open-ended, axis bore 6. Kendall discloses that the axis bore is square in cross-section and is designed to accommodate the side 3 of the core 1 (see col. 1, line 55 to col. 2, line 6 and FIG. 1). Kendall further discloses that an annular chamber 7 surrounds the bore 6 in the body 5 (col. 2, lines 8-9) and that the annular chamber covers the entire side 3 of core

1. Annular chamber 7 is not a loop shape formed by two distinct communication channels.

In other words, Kendall fails to disclose that fluid to be heated flows within a loop shape formed by distinct first and second communication channels extending around the iron-core leg, as recited in amended claim 1. Thus, Applicants respectfully submit, Kendall fails to disclose each and every element of amended claim 1.

For an anticipation rejection to be proper, the cited reference must disclose each and every element. As Kendall does not disclose all the recitations of amended claim 1, Applicants respectfully submit Kendall fails to anticipate claim 1 and that for at least the above reasons claim 1 is allowable over Kendall. Claim 4 depends from claim 1 and contains additional recitations thereto. Thus, for at least all of the reasons presented above, claim 4 is also not anticipated by Kendall.

The Examiner has also made GB 2 128 860 to Ellis of record. Ellis fails to disclose a heat pipe wound about an iron-core leg and having a loop shape formed by first and second communication channels, wherein the communication channels correspond to the cross-sectional shape of the iron-core leg. Rather, Ellis discloses that conduit legs 4 and 5 extend a considerable length, well beyond the core, and do not follow the shape of the core. At most, Ellis discloses that these conduit legs 4 and 5 are separated enough to permit a core to be placed between the legs. Ellis fails to disclose that these conduit legs correspond to (or follow) the cross-sectional shape of the core. Moreover, Ellis fails to disclose that the loop shape provides a channel for the heat-exposed food to constitute an electric closed loop circuit through the heat-exposed food supplied to the heat pipe. Applicants respectfully submit that Ellis fails to render any of the pending claims unpatentable.

As Applicants have traversed each and every rejection raised by the Examiner, it is hereby respectfully requested that Examiner withdraw the rejections of claims 1 and 4, and pass claims 1 and 4 to issue.

New claim 13 contains a limitation that the heat pipe is a substantially electrically non-conductive heat pipe. Support for this limitation may be found in, at

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least, paragraphs [0026], [0032] and [0033]. All of the cited references disclose heating units formed from electrically conductive material. Thus, Applicants respectfully submit that new claim 13 is allowable and should be passed to issue.

Do not hesitate to call Applicants' attorneys at the number below if they may help expedite the prosecution of this application in any way.

Applicant hereby petitions for a one-month extension of time in order to file a Response to Office Action in the above-identified application. The fee of \$60.00 required under 37 CFR 1.17(a) is enclosed.

If any additional extension of time for the accompanying response is required, applicant requests that this paper be considered a petition therefor.

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The Commissioner is authorized to charge any fees under 37 CFR 1.17(a) to (d), which may be required to Deposit Account No. 13-0235.

Respectfully submitted,

By



Jeanne M. Tanner
Registration No. 45,156
Attorney for Applicant

McCormick, Paulding & Huber LLP
CityPlace II, 185 Asylum Street
Hartford, CT 06103-3402
(860) 549-5290